

**CLAIMS**

1. A method of generating C code on the basis of UML specifications, characterized in that a detailed implementation model is produced in UML code, that the model thus created is exported in the form of a file in the XMI language, that this XMI file is dispatched to a file generation engine which is the "Model In Action" tool, that this tool is associated with a scripts parametrization application, and that this tool is made to produce files in the C language, namely ".C" files, ".H" files, a generation report file, configuration management "batch" files and compilation project files.
2. The method as claimed in claim 1, characterized in that the C code generated covers 100% of the UML specification of the software, the whole generation spectrum being processed both statically and dynamically.
3. The method as claimed in claim 1 or 2, characterized in that the model is produced with the aid of a UML modeling tool.
4. The method as claimed in claim 3, characterized in that the UML modeling tool is "RHAPSODY" from the company I-LOGIX.
5. The method as claimed in one of the preceding claims, characterized in that the generation report file comprises the following information:
  - version number of the reference report,
  - version number of the current report,
  - designation of the UML model with its state and its version number,
  - designation of the software collections produced with their state and their version number,
  - designation of the generation scenarios with their state and their version number,
  - designation of the files generated with their state and their version number,
  - name of the scenario in progress,

-name of the generated text files of the scenario.

6. The method as claimed in claim 5, characterized in that the scenarios are of the "Clearcase" type.

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7. The method as claimed in claim 5 or 6, characterized in that the states of the files generated are comparison states with respect to those of a previous generation (reference generation).

8. The method as claimed in claim 6, characterized in that the state of each file is one of the following:

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-new,

-unmodified,

-modified,

-modified manually,

-modified and modified manually,

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-eliminated.

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